



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/377,502	08/20/1999	WYATT PAUL	1012/60030/J	7914

7590 06/17/2002
JOHN P WHITE
COOPER & DUNHAM LLP
1185 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

FOX, DAVID T

ART UNIT	PAPER NUMBER
----------	--------------

1638

DATE MAILED: 06/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/377,502	Applicant(s) Paul et al
Examiner FOX	Group Art Unit 1638

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period of Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 4/4/02
- ☒ Responsive to communication(s) filed on _____.
 - ☒ This action is **FINAL**.
 - ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 1-49
- ☒ Claim(s) _____ is/are pending in the application.
 - Of the above claim(s) 3-4, 10-11, 17-18, 24-25, 32-49 is/are withdrawn from consideration.
 - ☐ Claim(s) _____ is/are allowed.
 - ☒ Claim(s) 1, 2, 5-9, 12-16, 19-23, 26-31 is/are rejected.
 - ☐ Claim(s) _____ is/are objected to.
 - ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Art Unit: 1638

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Newly submitted claims 40-49 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Claims 40-49 are drawn to non-elected Species II, namely the production of a male sterility protein.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 40-49 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicants' request to examine withdrawn claims per MPEP 809.02 is acknowledged. Since the generic claims are not allowable, this request has not been granted.

Applicants' amendment and arguments of 4 April 2002 has obviated the rejections of record under 35 USC 112, second paragraph, and the art rejections over WO 91/09957 (DUPONT) and WO 95/20668 (NICKERSON). These references each teach plant transformation with at least one gene encoding at least one active enzyme, contrary to the amended claims.

Claims 1-2, 6-7, 12, 14-16, 20-21, 26 and 28-31 remain rejected under 35 U.S.C. 102(b) as being anticipated by Krizek et al, as stated on page 3 of the last Office action.

Art Unit: 1638

Claims 1-2, 5-7, 9, 12, 14-16, 19-21, 23, 26 and 28-31 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Krizek et al, as stated on page 4 of the last office action.

Claims 1-2, 5-6, 8-9, 12-16, 19-20, 22-23 and 26-31 remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/00789 (ALKO GROUP) taken with WO 93/17093 (OY ALKO AB) and Hiatt et al, as stated in the paragraph bridging pages 4 and 5 of the last office action.

No claim is allowed.

Applicants' arguments filed 4 April 2002, insofar as they pertain to the rejections above, have been fully considered but they are not persuasive.

Applicants urge that the art rejections over Krizek et al are improper, given the teaching by that reference of individual plant transformation with a gene encoding either AP3 or PI, wherein each of these encoded proteins are transcription factors, and are therefore "regulatory proteins", which are prohibited by the claims. The Examiner maintains that the claims do not exclude the presence of transcription factors, and that the specification does not define "regulatory protein" to encompass transcription factors. The AP3/PI *dimer* is characterized in the instant specification as activating other genes (see, e.g., page 13 of the specification, lines 10-15), but it is unclear whether each individual protein has that activity. Furthermore, Applicants themselves constructed individual plants transformed with either the entire *AP3* gene or the entire *PI* gene, each operably linked to a plant-expressible promoter (see, e.g., pages 36-37 of the specification).

Art Unit: 1638

Applicants urge that the rejection under 35 USC 103 over a combination of references is improper, given the failure of the references to teach or suggest individual plants which are transformed with single genes which do not encode active enzymes. The Examiner maintains that the references taken together teach that yeast trehalose synthesis enzymes are composed of various subunits, and suggest that individual plants transformed with genes encoding individual subunits of the entire active enzyme complex may be crossed, in order to produce the entire active enzyme complex in particular tissues or at particular developmental stages, in order to minimize potential toxic effects of prolonged or constitutive trehalose exposure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

Application/Control Number: 09/377,502

Page 5

Art Unit: 1638

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

June 15, 2002

DAVID T. FOX
PRIMARY EXAMINER
GROUP 1638

A handwritten signature in black ink, appearing to read "David T. Fox", followed by a large, stylized flourish or checkmark.